

CLAIMS:

1. An appliance (3) for personal care, comprising:
a fluid channel (4) having an inlet opening (5) and an outlet opening (6);
a coupling structure (7) for coupling an outlet opening (18) of a cartridge (8) for storing an auxiliary fluid to the inlet opening (5) of the fluid channel (4),
- 5 characterized in that said coupling structure (7) comprises:
a contact element (71) with at least one orifice (75) forming the inlet opening (5) of the fluid channel (4), which contact element (71) is connectable to the outlet opening (18) of the cartridge (8), and
a sealing element (72) which is movable relative to the contact element (71) between a first position in which it covers the orifice (75) and a second position in which it is released from said orifice (75), said sealing element (72) comprising engagement means (73) for engaging with means (83) in the cartridge and moving the sealing element (72) into the first position upon disconnection of the cartridge (8) from the appliance (3).
- 10 2. An appliance for personal care as claimed in claim 1, characterized in that said engagement means (73) for engaging with means (83) in the cartridge (8) are arranged for moving the sealing element (72) into the second position upon connection of the cartridge (8) to the appliance (3).
- 15 3. An appliance for personal care as claimed in claim 1, characterized in that the sealing element (72) is releasably blocked in the first position.
- 20 4. An appliance for personal care as claimed in claim 1, characterized in that the sealing element (72) comprises an annular body (32) which is slidable along an outer surface of the contact element (71), said engagement means (73) comprising a collar (33) for cooperation with protuberances (34) provided in the outlet opening (18) of the cartridge.
- 25 5. An appliance for personal care as claimed in claim 1, characterized in that the sealing element (72) comprises a plug (32') which is slidable along an inner surface of the

contact element (71'), said engagement means (73') comprising a cavity (33') in said plug (32') for receiving a protruding end portion (34') provided in the outlet opening (18') of the cartridge (8').

5 6. An appliance for personal care as claimed in any of the preceding claims, characterized in that the contact element (71) comprises a longitudinally extending part provided with a tapered end.

10 7. An appliance for personal care as claimed in any of the preceding claims, wherein the appliance (3) is an electric toothbrush.

8. A cartridge (8) for use with an appliance for personal care (3) comprising a fluid channel (4) having an inlet opening (5) and an outlet opening (6), a coupling structure (7) for coupling an outlet opening (18) of said cartridge (8) to the inlet opening (5) of the fluid channel (4), said coupling structure (7) comprising a contact element (71) with at least one orifice (75) forming the inlet opening (5) of the fluid channel (4), which contact element (71) is connectable to the outlet opening (18) of the cartridge (8), and a sealing element (72) which is movable relative to the contact element (71) between a first position in which it covers the orifice (75) and a second position in which it is released from said orifice (75);
15 said sealing element (72) comprising engagement means (73) for engaging with means (83) in the cartridge and moving the sealing element (72) into the first position upon 20 disconnection of the cartridge (8) from the appliance (3),

25 said cartridge comprising a space for storage of an auxiliary fluid and said outlet opening (18) for coupling the cartridge (8) to said appliance (3), characterized in that the cartridge (8) comprises means (83) for cooperating with the engagement means (73) of the sealing element (72) of the coupling structure (7).

30 9. A cartridge as claimed in claim 8, characterized in that said means (83) comprise protuberances (34) for engagement with a collar (33) of an annular body (32) which is slidable along an outer surface of the contact element (71).

10. A cartridge as claimed in claim 8, characterized in that said means (83) comprise a protruding end portion (34') for engagement with a cavity (33') in a slidable plug (32') provided in the contact element (71).

11. A cartridge as claimed in claim 8, characterized in that its outlet opening (18) is provided with a closing member which is movable out of the outlet opening (18) upon coupling of the contact element (71) of the coupling structure (7) to the cartridge (8).

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12. A system for personal care, comprising a cartridge having a space for storing an auxiliary fluid as claimed in any of the claims 8 to 11, and an appliance as claimed in any of the claims 1 to 7.